

tapering white streak; a second similar streak below the median vein; an oblique band of five white spots beyond the cell, and a small spot close to the external angle: secondaries with the cell and a belt of white markings commencing on the interno-median area with two streaks, above it with three gradually decreasing spots, and terminating with a larger subapical spot. Body below white, the sides of the pectus and the legs varied with dark green. Expanse of wings 45 millim.

Sumatra.

Nyctemeridæ.

6. *Leptosoma melaneura*, sp. n.

Nearly allied to *L. coleta* of Cramer (which we have from Ceram, Malacca, and Java), but differing in the narrow black borders to its wings, the narrower irregular band across the primaries, and in the black colouring of the veins on all the wings. Expanse of wings 50 millim.

Island of Nias.

XXI.—Description of new Species of Reptiles and Batrachians in the British Museum. By G. A. BOULENGER.

(Plate V.)

Lipinia anolis, sp. n.

Snout pointed, as long as the distance between the eye and the ear-opening. Latter narrow, its anterior border with a feeble denticulation formed by four scales. Rostral large, truncated behind. Internasal pentagonal, about as large as one of the prefrontals. Latter in contact mesially, the suture measuring less than half their greatest length. Frontal four-sided, much longer than broad, the anterior sides forming an open angle, the posterior a very acute angle, the point being slightly rounded off. The suture between the frontoparietals measures at least half the length of the frontal. Interparietal of the same shape as the frontal, but smaller. Five supraorbitals, the anterior largest, but much shorter than the four others together; the space between the supraorbital regions considerably wider than in *Lipinia pulchella*. Nasal four-sided, pierced in the centre. Three loreals. Supero-labials eight or nine, sixth or seventh entering the orbit.

Three or four large shields on the temple. Mental large, truncate behind. Seven or eight lower labials, very narrow, in contact with five or six very large chin-shields, the anterior single, the others paired. Behind the parietals four or five pairs of large transversely dilated cervical scales. The scales of the body largest on the back, smallest on the sides; those of the two median dorsal series much the largest, twice as broad as long; sixty-five scales on the dorsal line, counted from the parietal shields to the base of the tail; thirty-eight series of scales round the body. Two large preanal scales. The fore limb carried forward does not reach the tip of the snout. Basal part of the fingers and toes distinctly dilated, with large transverse curved lamellæ; sixteen to eighteen lamellæ under the dilated part of the fourth toe, and seven under the compressed distal joint of same. Fourth digit slightly longer than fifth. The length of the tibia equals the distance between the tip of the snout and the pupil. The scales on the humerus and femur smaller than those on the forearm and leg. Uniform light olive-brown above, white beneath; head olive above.

| | millim. |
|-------------------------------------|---------|
| Total length | 135 |
| From snout to vent | 57 |
| Head (to ear-opening) | 14 |
| Width of head | 8.5 |
| From ear-opening to fore limb | 8 |
| Fore limb | 21 |
| Hind limb | 24 |
| Tail | 78 |

Several specimens were collected in the Solomon Islands (Treasury and Santa Anna) by H. B. Guppy, Esq., during the expedition of H.M.S. 'Lark.'

Rhacophorus lateralis, sp. n.

Vomerine teeth in two small oblique series between the choanæ. Snout rounded; canthus rostralis distinct; loreal region slightly concave; nostril nearer the tip of the snout than the eye; interorbital space broader than the upper eyelid; tympanum half the diameter of the eye. The three outer fingers nearly entirely webbed; toes nearly entirely webbed; disks of fingers and toes smaller than the tympanum; subarticular tubercles not very prominent; a rather indistinct inner metatarsal tubercle. The hind limb being carried forwards along the body, the tibio-tarsal articulation reaches the tip of the snout. Skin smooth, granular on the belly and under the thighs; a fold of the skin bordering the fore limb anteriorly. Purplish above, white beneath; head and back

with dark dots; coloured parts of limbs with dark cross lines; a white streak on each side, from the nostril along the outer edge of the upper eyelid to the groin; arm, the three inner fingers, and the four inner toes not coloured. From snout to vent 31 millim.

A single young specimen from Malabar, collected by Col. Beddome*.

Rappia Burtonii, sp. n.

Snout rounded, as long as the orbital diameter; tympanum hidden. Fingers half webbed; toes three-fourths webbed. The hind limb being carried forwards along the body, the tibio-tarsal articulation reaches between the eye and the tip of the snout. Skin smooth, granular on the belly; no fold across the chest. Upper surfaces and throat purplish grey; hands and feet (the disks excepted), sides and lower surface of hind limbs, a streak from nostril to eye, and marblings on the side of the body and behind the eye carmine; belly flesh-coloured; throat and belly with blackish spots. From snout to vent 27 millim.

Allied to *R. lagoensis*, Gthr.; but in that species the web reaches the disks of all the toes except the fourth, and the head is comparatively rather broader. In coloration the two species are extremely different.

A single female specimen was collected on the Ancober river, Gold Coast, and presented to the British Museum by Major Burton and Captain Cameron.

Bufo Andersonii, sp. n.

Crown without bony ridges; snout short, blunt; inter-orbital space flat, a little broader than the upper eyelid; tympanum very distinct, round, two thirds the diameter of the eye. First finger extending as far as or slightly beyond second; toes two-thirds or half webbed, with simple subarticular tubercles; two moderate metatarsal tubercles; a tarsal fold. The hind limb being carried forwards along the body, the tarso-metatarsal articulation reaches between the shoulder and the eye. Upper parts with irregular flat warts; parotoids large, elliptic, flat; brownish or olive-grey above, spotted or marbled with darker; beneath immaculate. Male with a subgular vocal sac. Size of *B. viridis*.

* Mentioning Colonel Beddome's important discoveries in Malabar, I must rectify a misprint which has occurred in the diagnosis of *Nannobatrachus Beddomii* in the 'Catalogue of Batrachia Ecaudata,' p. 470. For "interorbital space narrower than the upper eyelid," read "upper eyelid narrower than the interorbital space."

This toad has been accurately characterized by Anderson, P. Z. S. 1871, p. 203, but erroneously referred to "*Bufo pantherinus*" of authors. His specimens are from the Agra district, where it is said to be common. There are three specimens in the British Museum, all three presented by W. T. Blanford, Esq.; two half-grown from Ajmere, collected by Major St. John, and an adult female without locality. Other specimens, male and female, from Tatta, are in the Indian division at the Fisheries Exhibition, where they are put down as *Bufo melanostictus*.

Hyla glandulosa, sp. n.

Tongue circular, slightly nicked, and free behind. Vomerine teeth in two small oblique groups between the choanæ. Head moderate, a little broader than long; snout rounded, as long as the diameter of the orbit; canthus rostralis distinct; loreal region slightly concave; interorbital space a little broader than the upper eyelid; tympanum small, indistinct. Fingers large, distinctly webbed at the base; toes two-thirds webbed; disks well developed; subarticular tubercles moderate; no tarsal fold. The hind limb being carried forwards along the body, the tibio-tarsal articulation reaches the anterior corner of the eye. Upper surfaces covered with very small smooth warts; lower surfaces granulate. Green above, white beneath; a blackish streak from the nostril to the shoulder, passing through the eye, flanks with blackish variegation. From snout to vent 35 millim.

Two female specimens from Guatemala, presented by F. D. Godman, Esq.

Hyla macrops, sp. n.

Tongue oval, slightly nicked, and slightly free behind. Vomerine teeth in two groups between the choanæ; latter large. Head large, depressed, as long as broad; snout rounded, as long as the diameter of the orbit; canthus rostralis distinct; loreal region very oblique, concave; eye very large; interorbital space as broad as the upper eyelid; tympanum distinct, half the diameter of the eye. Fingers one-fourth webbed; no distinct rudiment of pollex; toes three-fourths webbed; disks of fingers and toes rather small, much smaller than the tympanum; subarticular tubercles small; two metatarsal tubercles, outer very small; no tarsal fold. The hind limb being carried forwards along the body, the tibio-tarsal articulation nearly reaches the tip of the snout. Skin smooth above, granulate beneath. Purplish brown above, white beneath, unspotted. Bones green. Male with an internal subgular

vocal sac and brown rugosities on the inner side of the first finger. From snout to vent 38 millim.

One male specimen, from Treasury Island, Solomon group, collected by H. B. Guppy, Esq., H.M.S. 'Lark.'

Hynobius lichenatus, sp. n. (Pl. V. fig. 1.)

In the shape of the series of palatine teeth intermediate between *Hynobius* and *Onychodactylus*. These series form a zigzag row, the central or posterior angle not extending posteriorly beyond the extremity of the outer branches. Head large, depressed, as broad as long; snout short, rounded; eyes rather large, prominent; no labial lobes. Body short, a little more than thrice the length of the head; the distance from snout to gular fold contained a little more than twice and a half in the distance from latter to cloaca. Limbs moderate; when laid against the body the fingers cross the toes. Fingers and toes moderate, depressed; fifth toe rudimentary, as in *Hynobius peropus*. Tail about as long as head and body, strongly compressed and keeled superiorly and inferiorly, ending in a blunt point. Skin smooth, shining; eleven costal grooves; a median dorsal groove; parotoids rather indistinct, porous; gular fold strongly marked; a distinct groove behind the angle of the jaws. Brown above, lighter beneath, with lichen-like greyish variegation; whitish dots on the sides of the body.

| | millim. |
|----------------------------|---------|
| Total length | 74 |
| From snout to cloaca | 38 |
| Head | 9 |
| Width of head | 8.5 |
| Fore limb | 13 |
| Hind limb | 14 |
| Tail | 36 |

A single specimen from Awomori, Japan, presented to the British Museum by George Lewis, Esq.

Spelerpes peruvianus, sp. n. (Pl. V. fig. 2.)

Palatine teeth in two arched series, extending externally beyond choanæ, separated from parasphenoid teeth; latter forming a pyramid-shaped patch. Head moderate, longer than broad; snout truncate, with a swelling below each nostril; eye rather large. Body about three times as long as the distance between the tip of the snout and the gular fold. Limbs weak, not meeting when adpressed; fingers and toes entirely united; no carpal or tarsal tubercles. Tail slightly compressed, a little shorter than head and body. Skin smooth; no parotoids; gular fold strong; costal grooves twelve, very indistinct; light brownish above, with ill-defined brown

longitudinal lines; a triangular dark spot, base forward, on the crown; lower surfaces and limbs brown, with slight lighter variegations.

| | millim. |
|----------------------------|---------|
| Total length | 75 |
| From snout to cloaca | 39 |
| Head | 7.5 |
| Width of head | 6 |
| Fore limb | 8.5 |
| Hind limb | 9 |
| Tail | 36 |

A female specimen was collected at Moyobamba by Mr. A. H. Roff.

This is the second species of Tailed Batrachians discovered south of the Equator. It resembles *S. rufescens*, Cope, from Central America, in most of its characters and in coloration; but that species has the body less elongate, and the palatine teeth do not extend outwards beyond the choanæ.

CRYPTOPSOPHIS, g. n. *Cæciliidurum*.

Squamosals in contact with parietals. A single series of teeth in the lower jaw. Tentacle globular, situated in front of the eye. Cycloid scales imbedded in the skin.

Cryptopsophis multiplicatus, sp. n.

Teeth rather small, subequal in each jaw, the mandibulars larger than the maxillaries, the palatines very small; number of teeth on one side—maxillary nineteen, mandibulars sixteen, palatines twenty. Snout rounded, prominent, as long as the distance between the eyes; latter very indistinct; tentacle below and in front of the eye, three times nearer the latter than the nostril. Body moderately elongate, rather depressed; 220 circular folds, the 22 anterior (primary) and the 25 posterior complete, the others alternately complete (primary folds) and interrupted on the ventral side (secondary folds). Tail indistinct, rounded. Olive-brown above, yellowish inferiorly. Total length 310 millim., greatest diameter of body 13 millim.

A single specimen, from the Seychelles, is in the British Museum.

This new genus agrees in every particular with *Dermophis*, except in the absence of a second row of mandibular teeth, a character which occurs in two other genera only, viz. *Siphonops* and *Scolecocomorphus*. This being the third new genus of Apoda discovered since the publication of the 'Catalogue of Batrachia Caudata and Apoda,' I add a synopsis of the genera known at present:—

I. Cycloid scales imbedded in the skin.

A. Eyes distinct or concealed under the skin.

1. Two series of teeth in the lower jaw.

a. Squamosal and parietal bones in contact.

Tentacle conical, exsertile 1. *Ichthyophis*, Fitz.

Tentacle flap-like, below the nostril 4. *Cæcilia*, L.

Tentacle flap-like, posterior to the nostril 5. *Hypogophis*, Ptrs.

Tentacle globular 6. *Dermophis*, Ptrs.

b. Squamosals separated from parietals.

Tentacle flap-like, close to the eye 2. *Epicrionops*, Blgr.

Tentacle conical, exsertile, below the nostril 3. *Uracotyphlus*, Ptrs.

2. A single series of teeth in the lower jaw.

Tentacle globular 7. *Cryptopsophis*, Blgr.

B. Eyes below the cranial bones.

Tentacle globular, nearer the commissure of the jaws than the nostril 8. *Gymnopsis*, Ptrs.

Tentacle globular, nearer the nostril than the commissure of the jaw 9. *Herpele*, Ptrs.

II. No scales.

A. Eyes below the cranial bones.

1. Two series of teeth in the lower jaw; squamosals in contact with parietals; tentacle globular 10. *Gegenophis*, Ptrs.

2. A single series of mandibular teeth; squamosals separated from parietals; tentacle globular 11. *Scolecocomorphus*, Blgr.

B. Eyes distinct or concealed under the skin.

1. A single series of teeth in the lower jaw; squamosals in contact with parietals; tentacle flap-like 12. *Siphonops*, Wagl.

2. Two series of teeth in the lower jaw; tentacle flap-like.

Parietals and squamosals in contact 13. *Typhlonectes*, Ptrs.

Parietals separated from squamosals 14. *Chthonerpeton*, Ptrs.

XXII.—On the 'Classification of the Coleoptera of North America,' by Dr. J. L. LeConte and Dr. G. H. Horn (Washington: 1883). By the Rev. A. MATTHEWS.

EUROPEAN entomologists are often impressed with the idea that their scientific brethren on the other side of the Atlantic are so embarrassed with the riches of their own fauna that they are comparatively unacquainted with the productions of the eastern hemisphere. But such a notion indicates a very imperfect comprehension of American intellect and American resources. No reason can be given to prove that a species